|          |               |          |          |              |          |           |          |              |          |              |              | 10/630,421 |          |        |              |              |          |          |              |          |          | RAPP ET AL.  |          |          |         |          |             |                         |           |          |           |              |               |               |          |          |      |
|----------|---------------|----------|----------|--------------|----------|-----------|----------|--------------|----------|--------------|--------------|------------|----------|--------|--------------|--------------|----------|----------|--------------|----------|----------|--------------|----------|----------|---------|----------|-------------|-------------------------|-----------|----------|-----------|--------------|---------------|---------------|----------|----------|------|
|          |               |          | H        |              |          |           | Ш        |              |          |              |              |            |          |        |              |              |          | E        | xa           | mi       | ner      | •            |          |          |         |          |             |                         | Α         | rt l     | Jni       | it           |               |               |          |          |      |
|          |               |          |          |              |          |           |          |              |          |              |              |            |          |        |              |              |          | l        | /isl         | nal      | Р        | ate          | el       |          |         |          | <del></del> |                         | 3         | 67       | 6_        |              |               |               |          |          |      |
|          |               |          |          |              |          |           | _        | ı            |          | _            | _            |            |          |        |              |              |          |          |              | 1        |          | T -          |          |          |         |          | 1           |                         |           |          |           |              |               |               | ,        |          |      |
|          |               | √        | ľ        | Reje         | ec       | tec       | ď        |              |          | -            | -            | (          | (Thr     | Ca     | gh r<br>ance | lle          | ne:<br>d | ral)     | )            |          | N        | ١            | lor      | ı-E      | lec     | ted      |             | A                       |           | F        | /bt       | oea          | 3 l           |               |          |          |      |
|          |               | =        | ۱,       | Allo         | w        | ed        | 1        |              |          | -            | -            |            |          | Re     | stri         | cte          | d        |          |              |          | ı        | ı            | nte      | rfe      | re      | nce      |             | o                       |           | O        | bje       | cte          | ed            |               |          |          |      |
| Cla      | aim           |          |          |              |          | Di        | ate      | <del>-</del> |          | _            |              | ٦          | Г        | Cla    | im           |              |          |          |              | Dat      | e        |              |          |          | 1       | CI       | aim         |                         | _         |          |           | Date         | <br>          | _             |          |          | )    |
| _        | a             | 2        |          |              |          | T         | Ī        |              | Γ        | T            | T            | ٦          | Г        |        |              | Γ            |          |          |              |          |          |              |          | Π        | 1       |          |             | П                       |           |          |           |              |               | Γ             |          |          |      |
| Final    | Original      | 3/8/05   |          |              |          |           |          |              |          |              |              |            | ļ        | Final  | Original     |              |          |          |              |          |          |              |          |          |         | Final    | Original    |                         |           |          |           |              |               |               |          |          |      |
|          | 1             | 1        |          |              | t        | 1         |          |              | L        | İ            | $\perp$      |            |          |        | 51           | Ė            |          |          |              |          |          | t            |          |          | 1       |          | 101         |                         |           |          |           |              |               | 上             |          |          |      |
|          | 3             | 1        | L        | +            | ╀        | ╬         | _        |              | ╁        | $\downarrow$ | 4            | 4          | -        |        | 52<br>53     | ╀            | <u> </u> | _        | <u> </u>     | _        |          | _            |          | -        | }       |          | 102         | Ш                       | _         |          |           |              | lacksquare    | $\sqsubseteq$ | <u> </u> |          |      |
|          | 4             | 1        | ┝        | ╁            | +        | $^{+}$    | -        |              | ╁        | ╁            | +            | $\dashv$   | -        |        | 54           | }-           | ╁        | ╁╴       | ╁            | ╁        | -        | ┢            | -        | -        | $\cdot$ | $\vdash$ | 103         | Н                       | $\dashv$  | -        | _         | _            | ├             | ╁             | H        | $\vdash$ |      |
|          | 5             | 1        |          |              | İ        | 1         |          |              |          | İ            | İ            | ]          | L        |        | 55           |              |          | İ        |              |          | _        | L            | T        |          | 1       |          | 105         |                         |           |          | _         |              |               | 士             |          |          |      |
|          | <u>6</u><br>7 | 1        | L        | 1            | ╁        | 1         | -        |              | ₋        | ╀            | 4            | 4          | L        |        | 56           | <u> </u>     | <u> </u> | 1        | lacksquare   | <u> </u> | <u> </u> |              | <u> </u> |          |         |          | 106         |                         | _         |          |           |              |               | oxdapprox     |          |          |      |
|          | 8             | 1        | $\vdash$ | +            | ╁        | ╁         | +        |              | ╁        | Ŧ            | ╁            | ┨          | $\vdash$ |        | 57<br>58     | <del> </del> | ┢        | ╁        | ╁            | ╁        | ┝        | ╁╴           | ├        | ├        | $\mid$  |          | 107<br>108  | Н                       | $\dashv$  | -        |           | -            | ⊢             | ⊬             | $\vdash$ | -        |      |
|          | 9             | 1        |          |              | İ        | 1         |          |              |          | İ            | 土            | ╛          |          |        | 59           |              | L        |          |              |          |          |              |          | <u> </u> | 1       |          | 109         |                         | ╛         |          |           |              |               | $\Box$        | H        | $\vdash$ |      |
| $\vdash$ | 10            | 1        | _        | 4            | ╀        | 4         | _        |              | <u> </u> | ╀            | +            | 4          | -        |        | 60           | _            | <u> </u> | $\perp$  | -            |          | L        |              | _        |          | -       |          | 110         |                         | _         |          |           |              | $\Box$        | lacksquare    | L        |          |      |
| $\vdash$ | 11            | 7        | $\vdash$ | ╁            | ╁        | ╫         | +        |              | ╁        | +            | +            | ┥          | -        |        | 61<br>62     | H            | 1        | ╁        | <del> </del> | ╁        | ┢        | ╁╴           | ├        | ┝        | 1       |          | 111<br>112  | Н                       | -         | $\dashv$ |           |              | ├             | ┼             | H        | H        |      |
|          | 13            | 1        |          |              | Ĺ        | 土         |          |              | L        | İ            |              | ゴ          |          |        | 63           |              |          |          |              |          |          |              |          | L        | 1       |          | 113         |                         |           |          |           |              | T             | $\vdash$      |          |          |      |
|          | 14            | 1        |          | ╄            | ╀.       | +         | _        |              | ┞        | +            | +            | 4          | $\perp$  |        | 64           |              | _        | Ļ        | 1            |          |          |              |          |          |         |          | 114         | Ш                       | $\Box$    |          |           |              |               | $\sqsubseteq$ |          |          |      |
|          | 15<br>16      | 7        |          | ╁╌           | ╁        | +         | +        | _            | ╁        | +            | +            | ┨          | $\vdash$ |        | 65<br>66     |              | ╁        | ╁        | ╁            | ┝        | ┢        | ┝            | ┝        | ╁        | -       | -        | 115<br>116  | $\vdash$                | -         | $\dashv$ |           |              | ├             | ₩             | -        | H        |      |
|          | 17            | 1        |          | İ            | İ        | I         |          |              |          | t            | Ť            | ゴ          |          |        | 67           |              |          |          |              |          |          |              |          | 一        |         |          | 117         | H                       | ┪         |          | _         |              | $\vdash$      | $\vdash$      |          |          |      |
|          | 18            | 1        | L        | _            | $\perp$  | 4         | 4        |              | $\vdash$ | $\perp$      | $\downarrow$ | 4          |          |        | 68           | _            | <u> </u> | _        | _            |          |          | L            |          | L        | ]       |          | 118         |                         |           |          |           |              |               | $\sqsubseteq$ |          |          | ĺ    |
| -        | 19<br>20      | 1        | -        | +            | ╁        | +         | ┥        |              | $\vdash$ | +            | +            | $\dashv$   | $\vdash$ |        | 69<br>70     | -            | ╀        | ╀        | ╀            |          | $\vdash$ | ┢            | H        | -        | ł       |          | 119<br>120  | $\left  \cdot \right $  | $\dashv$  | -        |           | -            | ⊢             | ⊢             | $\vdash$ |          |      |
|          | 21            | 1        |          |              |          | 1         |          |              |          |              | t            | 1          |          |        | 71           |              |          | T        |              | $\vdash$ | $\vdash$ | $\vdash$     |          | $\vdash$ | 1       | -        | 121         | H                       | 1         | -        | _         | <del> </del> | ╁             | $\vdash$      |          | -        |      |
|          | 22            | 1        | _        | $\bot$       | $\perp$  | 4         | 4        |              | L        | Ţ            | $\bot$       | 4          |          |        | 72           |              |          |          | L            | _        | L        |              | L        | L        | ]       |          | 122         | П                       |           |          |           |              |               | $\Box$        |          |          |      |
|          | 23<br>24      | H        | _        | +            | ╁        | ╁         | $\dashv$ |              | ╁        | +            | +            | $\dashv$   | $\vdash$ |        | 73<br>74     | H            | ┝        | +        | $\vdash$     | -        | ┝        | ┝            | ├        | ┝        | 1       | -        | 123<br>124  | $\vdash$                | +         | $\dashv$ |           |              | ├             | ⊬             |          | Н        |      |
|          | 25            |          |          |              |          | $\dagger$ | 1        |              | T        | T            | t            | ╛          |          |        | 75           |              |          |          | T            | -        | $\vdash$ |              | T        | ┢        | 1       | -        | 125         | $\vdash$                |           | $\dashv$ |           |              | <del> </del>  | ⇈             | -        | Н        |      |
|          | 26            |          |          | $\bot$       | Ļ        | Ŧ         |          |              | Γ        | Ţ            | Ţ            | $\Box$     | F        |        | 76           |              |          |          |              |          |          |              |          |          | 1       |          | 126         |                         |           | $\Box$   |           |              |               |               |          |          |      |
|          | 27<br>28      | -        | _        | ╁            | ╀        | +         | 4        |              | H        | ╁            | +            | ┥          | ┢        | _      | 77<br>78     | -            | H        | ╀        | }            | ├        | ⊢        | -            |          | ┝        | ┨       |          | 127<br>128  | $\left  \cdot \right $  | $\dashv$  |          | _         | L            | ⊢             | ╀             |          | Щ        |      |
|          | 29            |          |          | $\perp$      | T        | $\pm$     |          |              | T        | $^{\dagger}$ | $\perp$      |            |          |        | 79           |              |          |          |              | $\vdash$ |          | <u> </u>     | <u> </u> |          | 1       | -        | 129         | H                       | _         | 1        | -         | H            | ┢             | ┢             | $\vdash$ | Н        |      |
|          | 30            | Ш        |          | $\bot$       | L        | Ţ         |          |              | L        | Ţ            | Ţ            | $\Box$     |          |        | 80           |              |          |          |              |          |          |              |          |          | ]       |          | 130         |                         |           |          |           |              |               | 匚             |          |          |      |
|          | 31<br>32      | $\vdash$ |          | +            | +        | +         | +        |              | $\vdash$ | +            | +            | 4          | $\vdash$ |        | 81<br>82     | $\vdash$     | ┼-       | $\vdash$ | ╁            | $\vdash$ | $\vdash$ | ├-           | ┝        | $\vdash$ | 1       | $\vdash$ | 131<br>132  | $\vdash$                | $\dashv$  |          | _         | $\vdash$     | $\vdash$      | $\vdash$      | $\vdash$ |          |      |
|          | 33            |          |          |              | İ        | 1         |          |              | L        | İ            | 上            |            |          |        | 83           |              |          |          |              |          |          |              |          |          | 1       |          | 133         | H                       | _         |          |           | $\vdash$     |               | -             |          |          |      |
|          | 34            | П        |          | $\bot$       | L        | $\bot$    | 4        |              |          | F            | Ţ            | $\rfloor$  |          | $\Box$ | 84           |              |          | F        | L            |          |          |              |          |          | ]       |          | 134         |                         |           | $\Box$   |           |              |               | $\sqsubseteq$ |          |          |      |
|          | 35<br>36      | Н        | _        | +            | +        | +         | +        | _            | $\vdash$ | +            | +            | $\dashv$   | -        |        | 85<br>86     | $\vdash$     | $\vdash$ | +        | -            | ⊢        | ⊢        | $\vdash$     | -        | -        | 1       |          | 135<br>136  | $\vdash \mid$           | $\dashv$  |          | $\dashv$  | _            | <u> </u>      | $\vdash$      | H        | Н        |      |
|          | 37            |          |          |              |          | 1         |          |              | L        | 1            | 1            |            |          |        | 87           |              |          | Ħ        | L            |          |          | L            |          | $\vdash$ | 1       |          | 137         | $\vdash \vdash$         | $\dashv$  | $\dashv$ | $\dashv$  | -            | <u> </u>      |               | H        | Н        | ]    |
|          | 38            |          |          | L            | L        | Ţ         | $\Box$   |              | L        | Ţ            | Ţ            | 7          |          |        | 88           |              |          | L        |              |          |          |              |          |          | ]       |          | 138         |                         |           |          |           |              |               |               |          | 7        |      |
|          | 39<br>40      | $\vdash$ | _        | ╁            | +        | +         | $\dashv$ |              | +        | +            | +            | $\dashv$   | -        |        | 89<br>90     | ├-           | $\vdash$ | ╀        | ╀            |          | <u> </u> | <del> </del> | -        | $\vdash$ | -       | <u> </u> | 139<br>140  | $\vdash \vdash$         | $\dashv$  |          |           |              | -             | $\vdash$      | Н        | Щ        |      |
|          | 41            |          | _        |              | Ľ        | 士         | <u> </u> |              | L        | İ            | 士            | _          |          |        | 91           |              |          |          | $\perp$      | $\vdash$ | $\vdash$ | H            | H        |          |         |          | 141         | $\vdash \vdash$         | +         | $\dashv$ | $\dashv$  |              |               | $\vdash$      | H        | H        |      |
|          | 42            |          |          | L            | F        | Ţ         | 1        |              |          | Į            | T            |            |          | $\Box$ | 92           |              |          |          | Г            |          |          | <u> </u>     |          |          | ]       |          | 142         |                         | $\exists$ | 耳        |           |              |               | $\Box$        |          |          |      |
|          | 43<br>44      |          |          | +            | $\vdash$ | +         | +        |              | $\vdash$ | ╀            | +            | $\dashv$   | $\vdash$ |        | 93<br>94     | -            | $\vdash$ | $\vdash$ | -            | -        | -        | $\vdash$     | <u> </u> | <u> </u> | ł       |          | 143<br>144  | $\vdash \vdash$         | $\dashv$  |          | $\dashv$  |              | $\vdash$      | $\vdash$      | H        | Н        |      |
|          | 45            |          |          | $\perp$      | $\vdash$ | $\dagger$ | 7        |              |          | $\dagger$    | +            | 1          | $\vdash$ | _1     | 95           | -            |          | $\vdash$ | $\vdash$     |          | -        | $\vdash$     |          | $\vdash$ | ł       | -        | 145         | $\mid \rightarrow \mid$ | $\dashv$  | $\dashv$ | $\dashv$  |              | H             | H             | H        |          |      |
|          | 46            | П        |          | oxday        | Г        | Ţ         | 7        |              |          | F            | T            | 7          |          |        | 96           |              |          |          |              |          |          |              |          |          | ]       |          | 146         |                         | $\exists$ | 二        |           |              | $\sqsubseteq$ |               |          |          |      |
|          | 47<br>48      |          | -        | ╁            | ╀        | ╁         | +        |              | ├        | ╁            | +            | $\dashv$   | -        | -      | 97<br>98     | $\vdash$     | $\vdash$ | $\vdash$ | ├-           | -        |          |              | -        |          | 1       | <u> </u> | 147<br>148  | $\vdash$                | $\dashv$  | -        |           |              | $\vdash$      | $\vdash$      | Н        | Н        | <br> |
|          | 49            | H        |          | $^{\dagger}$ | T        | $\dagger$ | 7        |              |          | $\dagger$    | $^{\dagger}$ | _          | $\vdash$ | _      | 99           |              | $\vdash$ | $\vdash$ | -            | $\vdash$ | -        |              | -        | -        | 1       | -        | 149         | ┝╌┤                     | $\dashv$  | $\dashv$ | $\dashv$  | Н            | Н             | $\vdash$      | Н        | $\dashv$ | I    |
|          | 50            |          |          |              |          |           | T        |              |          | Γ            | T            | ]          |          |        | 100          |              |          |          | П            |          | Г        | Г            | Г        | Г        | 1       |          | 150         | П                       | 寸         | 7        | $\exists$ |              | Г             | Н             | П        | Н        | 1    |

Application No.

Index of Claims

Applicant(s)